

University of Missouri

Bachelor of Science in Computer Engineering

Transfer Guide for Ozarks Technical Community College

This plan is intended only as a general guide based on requirements in the 2013-2014 University of Missouri undergraduate catalog. Check the following web sites for current course descriptions, prerequisites, course equivalencies and other specific details about the Computer Engineering major:

- 1) College Catalog (<http://registrar.missouri.edu/>)
- 2) Transfer Equivalencies (<http://transfercourses.missouri.edu>)
- 3) General Education (<http://generaleducation.missouri.edu>)
- 4) Electrical Engineering (<http://engineering.missouri.edu/ece/degree-programs/>)

For more information, contact the Department of Electrical and Computer Engineering at 573-882-2648 or Beattyt@missouri.edu.

University of Missouri		Ozarks Technical Community College	
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)	
Mathematics (22 credits)			
MATH 1500 Analytic Geometry and Calculus I	5	MTH 140 Analy Geom/Calc I (5)	
MATH 1700 Calculus II	5	MTH 141 Analy Geom/Calc II (5)	
MATH 2300 Calculus III	3	MTH 240 Analy Geom/Calc III (3)	
MATH 4100 Differential Equations	3	MTH 241 Differential Equations (3)	
STAT 4710 Intro to Mathematical Statistics	3	None	
Math 2320 Discrete Mathematical Structures	3	None	
Physics and Chemistry (14 credits)			
CHEM 1320 College Chemistry I	4	CHM 111 Gen Chemistry I (5)	
PHYSCS 2750 University Physics I	5	PHY 220 Physics for Engr & Sci I (5)	
PHYSCS 2760 University Physics II	5	PHY 222 Physics for Engr & Sci II (5)	
English Exposition and Argumentation (3 credits)			
ENGLISH 1000 Exposition and Argumentation	3	ENG 102 Comp II (3)	
Behavioral & Social Science (9 credits) Courses from at least two different departments.			
State Requirement in Government or History	3	Select state requirement from the general education list.	
Social or Behavioral Science Elective	3	Select social or behavioral sciences from the general education list.	
Social or Behavioral Science Elective	3		
Humanities/Fine Arts (Option 1 – Conventional Track) (9 credits) ▪ Only one humanities/fine arts track (Conventional or Foreign Language) must be completed ▪ Courses from at least two different departments ▪ A maximum of 3 credit hours for skills classes ▪ No foreign language courses may be used for this option			
Humanity 1	3	Select humanities from the general education list.	
Humanity 2	3		
Humanity 3	3		
Humanities/Fine Arts (Option 2 - Foreign Language Track) (12 credits) ▪ Only one humanities/fine arts track (Conventional or Foreign Language) must be completed ▪ Minimum of 12 college transcribed hours in a single foreign language ▪ Satisfies the 2000-level requirement			
Foreign Language 1	5	Select foreign language courses from the general education list.	
Foreign Language 2	5		
Foreign Language 3	3		
Upper Level General Education (3 credits)			
At least 3 credit hours of behavioral science, social science or humanity must be at the 2000-level or above			
<input checked="" type="checkbox"/> Upper-level general education courses may also count toward behavioral sciences, social sciences, or humanities.			
Upper Level Course	3	Select 200/2000-level behavioral science, social science, or humanity from the general education list. Level is based upon the community college course number, NOT the MU equivalent.	
Writing Intensive (6 credits)			
Writing intensive course (humanity, social or behavioral science or technical elective)	3	Must be taken at MU	
ECE 4970 Capstone Design	3	Must be taken at MU	
Engineering (59 credits)			
CS 1050 Algorithm Design and Programming	3	None	
CS 2050 Algorithm Design and Programming II	3	None	
Select one of the following:			
ENGINR 1200 Statics and Elementary Strength of Materials	3	None or	
ENGINR 2300 Engineering Thermodynamics		None	
IMSE 2710 Engineering Economic Analysis			
ECE 1000 Intro to Electrical and Computer Engineering	2	None	
ECE 1210 Intro to Logic Systems	3	None	

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COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)
ECE 2100 Circuit Theory I	4	None
ECE 3210 Microprocessor Engineering	4	None
ECE 3220 Computing for Embedded Systems	3	None
ECE 3810 Circuit Theory II	4	None
ECE 3410 Electronic Circuits and Signals I	4	None
ECE 3830 Signals and Linear Systems	3	None
ECE 4220 Real Time Embedded Systems	3	None
ECE 4250 VHDL and Programmable Logic Devices	4	None
ECE 4270 Microcomputer Architecture and Interfacing	4	None
ECE 3110 Electrical and Computer Engineering Projects	3	None
ECE 4970 Senior Capstone Design(<i>Writing Intensive</i>)	3	None
Technical Elective (9 credits)		
ECE or CS 3000+ or Math, Physics, Chemistry, BioE, ChemE, Civil, IMSE, MAE Engr.2000+	9	None
ECE Electives (6 credits)		
ECE Electives (4000+)	6	None
Free Electives (1 credit)		
Total Hours for BS in Computer Engineering	126	

General Education Courses Ozarks Technical College

<u>Ozarks Technical College Course</u>	<u>MU Equivalent</u>	<u>Ozarks Technical College Course</u>	<u>MU Equivalent</u>
Behavioral Sciences		Social Sciences (◆=State Requirement)	
ANT 101 Intro Anthropology (3)	ANTHRO 1000	ECO 270 Princ of Macroeconomics (3)	ECONOM 1015
ANT 220 Cultural Anthro (3)	ANTHRO 2030	ECO 275 Princ of Microeconomics (3)	ECONOM 1014
COM 200 Interpersonal Comm (3)	COMMUN 3561	GRY 101 World Geog (3)	GEOG SSC
PSY 110 Intro Psychology (3)	PSYCH 1000	GRY 230 World Econ Geog (3)	GEOG 2710
PSY 100 Psychology of Personal Adjustment (3)	PSYCH BEH	HST 105 World in Hist I (3)	HIST SSC
PSY 130 Life Span Dev Psych (3)	PSYCH BEH	HST 106 World Hist II (3)	HIST SSC
PSY 260 Child Psych (3)	PSYCH 2410	◆HST 120 US History I: to 1865 (3)	HIST 1100
PSY 265 Adolescent Psychology (3)	PSYCH BEH	◆HST 130 US History II: 1865 to the Present (3)	HIST 1200
PSY 275 Consumer Psych (3)	PSYCH BEH	◆HST 230 20th Cent Amer (3)	HIST 2210
PSY 280 Social Psych (3)	PSYCH 2310	◆PLS 101 Amer Gov & Politics (3)	POL_SC 1100
PSY 285 Abnormal Psych (3)	PSYCH 2510	PLS 102 MO Gov/Const (1)	POL_SC SSC
SOC 101 Intro to Sociology (3)	SOCIOLOG 1000	PLS 103 Intro Amer Pub Policy (3)	POL_SC SSC
SOC 200 Cultural Diversity (3)	SOCIOLOG BEH	PLS 201 Internat Relations (3)	POL_SC 1400
SOC 225 Soc of Family (3)	SOCIOLOG 3420	PLS 250 Pol of the Environ (3)	POL_SC SSC
		PLS 255 Environ Laws & Reg (3)	POL_SC SSC
		SOC 210 Urban Sociology (3)	SOCIOLOG 3000
Humanities		Foreign Language	
ART 101 Art History I (3)	AR_H_A 1110	FRN 101 Beginning French I (3)	FRENCH 1100A
ART 105 Art History II (3)	AR_H_A 1120	FRN 102 Beginning French II (3)	FRENCH 1100B
ART 110 Art & Experience (3)	ART_GNR1020	GRM 101 Beg German I (3)	GERMAN 1100A
COM 105 Public Speaking (3)	COMMUN 1200	GRM 102 Beg German II (3)	GERMAN 1100B
COM 150 Intro Mass Comm (3)	COMMUN 2100	SPN 101 Beg Spanish I (3)	SPAN 1100A
ENG 180 Intro to Literature (3)	ENGLISH LIT	SPN 102 Beg Spanish II (3)	SPAN 1100B
ENG 195 Sel Tops in Lit (1)	ENGLISH LIT	SPN 201 Interm Span I (3)	SPAN 1200
ENG 220 Amer Lit: Beg-1870 (3)	ENGLISH 2300	SPN 202 Interm Span II (3)	SPAN 2100
ENG 225 Amer Lit: 1870-Pres (3)	ENGLISH 2300		
ENG 240 British Lit: Beg-1790 (3)	ENGLISH 2200		
ENG 245 British Lit: 1790-Pres (3)	ENGLISH 2200		
ENG 250 Children's Lit (3)	ENGLISH LIT		
ENG 260 Surv World Lit I (3)	ENGLISH 2155		
ENG 265 Surv World Lit II (3)	ENGLISH 2155		
HUM 101 Intro Humanities (3)	MISC HUM		
HUM 102 World Humanities (3)	MISC HUM		
MUS 101 Music of the World (3)	MUSIC_N1313		
MUS 105 Western Music (3)	MUSIC_N1310		
MUS 110 Music Fund (3)	MUSIC_N1211		
MUS 120 Music Theory I (2)	MUS_THR1220		
MUS 121 Music Theory II (2)	MUS_THR1221		
MUS 201 Latin Amer Music (3)	MUSIC_NHUM		
PHL 101 Intro to Philosophy (3)	PHIL 1000		
PHL 105 Intro Ethics (3)	PHIL 1100		
PHL 110 Rel of the World (3)	REL_ST 2110		
PHL 120 Intro New Testament (3)	REL_ST 2510		
THR 101 Intro Theater (3)	THEATR 1100		
THR 110 Acting Fund (3)	THEATR 1400		
THR 115 Intro Script Analy (3)	THEATR 2800		